

Monthly Wholesale Trade

Sales and Inventories

June 1999

BW/99-6 Issued August 1999

U.S. Department of Commerce Economics and Statistics Administration U.S. CENSUS BUREAU

MONTHLY WHOLESALE TRADE: SALES AND INVENTORIES JUNE 1999

Notice of Revised Data: Monthly wholesale data were revised based on the preliminary results of the 1997 Census of Wholesale Trade. The Annual Benchmark Report for Wholesale Trade showing revised data was released on August 6, 1999.

Sales. June 1999 sales of merchant wholesalers, after adjustment for seasonal variations and trading-day differences but not for price changes, were \$228.1 billion, up 1.9 percent (+/-0.6%) from the revised May level and were 8.3 percent (+/-1.2%) above the June 1998 level. The May preliminary estimate was revised upward \$0.7 billion or 0.3 percent. June sales of durable goods increased 1.3 percent from last month (+/-0.8%) and were 6.9 percent (+/-1.7%) above last year. Compared to last month, sales of electrical goods increased 2.1 percent and motor vehicles and automotive equipment grew 1.7 percent. June sales of nondurable goods increased 2.6 percent (+/-0.9%) from May and were up 9.9 percent (+/-1.2%) from last year. Sales of chemicals and allied products were up 4.4 percent from last month and farm-product raw materials were up 4.3 percent.

Inventories. Total inventories of merchant wholesalers, after adjustment for seasonal variations but not for price changes, were \$291.0 billion at the end of June, up 0.3 percent (+/-0.4%) from the

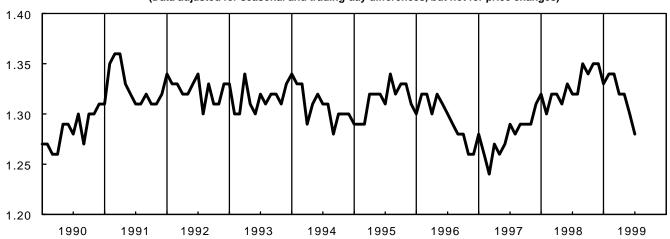
revised May level and were 4.3 percent (+/-0.9%) above June 1998. The May preliminary estimate was revised downward \$0.5 billion or 0.2 percent. End-of-month inventories of durable goods increased 0.5 percent (+/-0.5%) from last month and were 4.8 percent

(+/-1.4%) above June 1998. Among nondurable goods, inventories of petroleum and petroleum products increased 6.3 percent from May, while inventories of apparel, piece goods, and notions fell 4.8 percent.

Inventories/Sales Ratio. The June inventories/sales ratio for merchant wholesalers, based on seasonally adjusted data, was 1.28. The June 1998 ratio was 1.32.

Data in this report are based on a sample and, therefore, are subject to sampling and nonsampling variability. A discussion of the reliability of the data and general survey methodology appears in BW/98-A Current Business Reports.

Monthly Inventories/Sales Ratios of Merchant Wholesalers: 1990 to 1999 (Data adjusted for seasonal and trading-day differences, but not for price changes)



Monthly Wholesale Trade for July is scheduled to be released September 8, 1999 at 10:00 a.m.

Address inquiries concerning this report to Service Sector Statistics Division, U.S. Census Bureau, Washington, DC 20233, or call Ronald Piencykoski, 301-457-2779 or 301-457-2764. For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

This report is available on day of issue through the Department of Commerce's online Economic Bulletin Board (202-482-1986). The data are also available on the Internet - http://www.census.gov/svsd/www/mwts.html.

Table 1. Estimated Monthly Sales, Inventories, and Inventories/Sales Ratios of Merchant Wholesalers: 1999 and 1998

[In millions of dollars]

[In millions of dollars]																
		Sales					Inventories						Inventories/sales			
		Monthly			Percent change			Monthly			Percent change			ratios		
SIC ¹	Kind of	Jun.	May	Jun.	Jun./	May/	Jun. 99	Jun.	May	Jun.	Jun./	May/	Jun. 99	Jun.	May	Jun.
code	Business	1999	1999	1998	May	Apr.	Jun. 98	1999	1999	1998	May	Apr.	Jun. 98	1999	1999	1998
		(p)	(r)	(r)				(p)	(r)	(r)				(p)	(r)	(r)
Adjus	ted ²															
	U.S. Total	228,123	223,909	210,660	1.9	1.8	8.3	290,975	290,216	278,881	0.3	0.2	4.3	1.28	1.30	1.32
50	Durable	121,598	120,055	113,739	1.3	1.6	6.9	190,718	189,689	182,044	0.5	0.6	4.8	1.57	1.58	1.60
501	Automotive	18,825	18,519	16,530	1.7	-0.2	13.9	27,629	27,590	25,349	0.1	1.4	9.0	1.47	1.49	1.53
502	Furniture	4,132	4,063	4,058	1.7	1.5	1.8	6,053	5,958	5,956	1.6	0.6	1.6	1.46	1.47	1.47
503	Lumber	8,780	8,638	7,519	1.6	2.2	16.8	8,688	8,681	8,301	0.1	1.8	4.7	0.99	1.00	1.10
504	Prof. equip.	22,848	22,591	21,468	1.1	3.8	6.4	25,465	25,273	27,174	8.0	1.2	-6.3	1.11	1.12	1.27
505	Metals	7,579	7,568	8,065	0.1	-0.7	-6.0	12,965	12,940	13,249	0.2	0.6	-2.1	1.71	1.71	1.64
506	Electrical	19,396	18,989	17,738	2.1	0.7	9.3	26,562	26,397	25,474	0.6	1.3	4.3	1.37	1.39	1.44
507	Hardware	6,828	6,956	6,602	-1.8	1.2 1.4	3.4	13,260	13,196	13,238	0.5 0.9	-0.4 -0.5	0.2	1.94	1.90	2.01 2.30
508 509	Machinery	20,615 12,595	20,257 12,474	20,286 11,473	1.8 1.0	4.0	1.6 9.8	52,001 18,095	51,524 18,130	46,580 16,723	-0.2	0.5	11.6 8.2	2.52 1.44	2.54 1.45	2.30 1.46
509 51	Other Durable Nondurable	106,525	103,854	96,921	2.6	2.0	9.9	100,257	100,527	96,837	-0.2	-0.5	3.5	0.94	0.97	1.00
511	Paper	8,166	8,194	7,560	-0.3	4.2	8.0	9,871	9,682	9,343	2.0	0.6	5.7	1.21	1.18	1.24
512	Drugs	12,372	12,090	10,095	2.3	1.0	22.6	17,254	16,768	14,266	2.9	2.3	20.9	1.39	1.39	1.41
513	Apparel	7,816	7,915	7,046	-1.3	4.7	10.9	11,317	11,887	12,634	-4.8	-0.8	-10.4	1.45	1.50	1.79
514	Groceries	30,005	30,156	28,882	-0.5	1.0	3.9	17,784	17,963	17,277	-1.0	-0.7	2.9	0.59	0.60	0.60
515	Farm-products	,	8,636	8,750	4.3	6.4	2.9	10,680	11,057	9,862	-3.4	0.3	8.3	1.19	1.28	1.13
516	Chemicals	4,480	4,292	4,470	4.4	0.5	0.2	4,768	4,765	4,725	0.1	-1.8	0.9	1.06	1.11	1.06
517	Petroleum	12,238	11,932	10,315	2.6	4.5	18.6	4,113	3,869	4,377	6.3	-2.4	-6.0	0.34	0.32	0.42
518	Alcohol	5,570	5,449	4,966	2.2	-0.1	12.2	6,438	6,745	5,886	-4.6	4.4	9.4	1.16	1.24	1.19
519	Other Nondur.	16,872	15,190	14,837	11.1	-0.6	13.7	18,032	17,791	18,467	1.4	-4.4	-2.4	1.07	1.17	1.24
Not A	Adjusted													Sale	s to c	late
1101 /														Sales to date		1998
	U.S. Total	237,521	221,805	220,052	7.1	-0.3	7.9	287,593	288,339	275,757	-0.3	-1.1	4.3	1,307,80	02 1,2	48,985
50	Durable	128,407	117,127	120,596	9.6	-1.6	6.5	191,554	191,300	182,801	0.1	0.5	4.8	699,62	27 6	69,484
501	Automotive	20,067	18,556	17,588	8.1	-4.4	14.1	27,325	27,756	25,070	-1.6	0.5	9.0	110,4	63	99,719
502	Furniture	4,190	3,937	4,188	6.4	-3.2	0.0	6,168	5,934	6,063	3.9	2.8	1.7	23,4	48	23,332
503	Lumber	9,877	8,793	8,369	12.3	2.1	18.0	8,983	8,924	8,567	0.7	1.8	4.9	49,	162	43,532
504	Prof. equip.	24,287	21,123	22,842	15.0	-0.6	6.3	25,338	25,172	27,011	0.7	0.0	-6.2	129,5	554	124,825
505	Metals	8,003	7,447	8,476	7.5	-5.3	-5.6	13,004	12,992	13,289	0.1	0.5	-2.1	46,6	98	49,477
506	E lectrical	20,075	18,040	18,323	11.3	-1.1	9.6	27,120	26,555	26,009	2.1	2.3	4.3	109,2	210	102,369
507	Hardware	7,545	6,852	7,328	10.1	0.6	3.0	13,459	13,513	13,423	-0.4	-0.1	0.3	39,8		37,744
508	Machinery	21,831	20,541	21,929	6.3	-3.3	-0.4	52,261	52,451	46,813	-0.4	-0.7	11.6	121,8		122,498
509	Other Durable	12,532	11,838	11,553	5.9	2.4	8.5	17,896	18,003	16,556	-0.6	1.5	8.1	69,3		65,988
51	Nondurable	109,114	104,678	99,456	4.2	1.2	9.7	96,039	97,039	92,956	-1.0	-4.3	3.3	608,17		79,501
511	Paper	8,166		7,530	6.6	-2.1		9,693	9,479	9,175	2.3	-2.3	5.6	47,0		43,583
512	Drugs	12,323	11,413	10,095	8.0	-5.6	22.1	· '	16,013	13,795	4.2	-2.9	20.9	70,		59,776
513	Apparel	7,777	6,593	6,947	18.0	-9.1			11,590	12,849	-0.6	0.6	-10.3	44,6		42,595
514	Groceries	30,785	1	29,662	-1.1	5.9	3.8	17,553	17,855	17,052	-1.7	0.0	2.9	175,6		168,899
	Farm-products			8,304	3.3	7.6	2.5		9,177	7,594	-10.5	-16.0	8.2	50,		54,516
516 517	Chemicals	4,915	4,374	4,863	12.4	0.4	1.1	· '	4,832	4,711	-1.8		0.7	26,3		27,892
517 518	Petroleum	12,091 6,172		10,202 5,458	2.2 11.0	0.7 1.9	18.5 13.1		3,869 6,522	4,193 5,951	1.7 0.1	-1.6 1.7	-6.1 9.7	64,9 31,0		60,773 28,559
518	Alcohol Other Nondur.												9.7 -2.7	98,0		
519		18,374	17,894	16,395	2.7	1.4	12.1	17,166	17,702	17,636	-3.0	-10.1	-2.7	98,0	124	92,908

p Preliminary estimate. r Revised.

¹ For a full description of the SIC codes shown above, see the "1987 Standard Industrial Classification Manual" or the Current Business Reports "Annual Benchmark Report for Wholesale Trade" publication.

² Data adjusted for seasonal variations and, in the case of sales, also for trading-day differences. See Table 3 for seasonal adjustment factors used.

Table 2. Coefficients of Variation and Standard Error for Sales and Inventories

	Kind of Business	Coeffi		variation fo	or level	s	tandard er	ror for tre	nd	variation	ients of for level	Standard error for trend
SIC code			ninary nates	Final estimates		Ratio of two consecutive months		Year-to-year estimates		Cumulative sales estimates		Current year cumulative
		Sales	Inv	Sales	Inv	Sales	Inv	Sales	Inv	Current	Previous	to previous year
		Median	Median	Median	Median	Median	Median	Median	Median	year	year	cumulative
	U.S. Total	1.1	1.4	1.1	1.3	0.4	0.2	0.8	0.9	1.2	1.1	0.7
50	Durable	1.8	2.4	1.9	2.3	0.6	0.3	1.1	1.0	1.8	2.2	1.0
501	Automotive	4.3	4.8	4.2	4.8	1.0	0.8	2.2	2.9	4.4	5.1	2.1
502	Furniture	6.5	7.8	6.4	7.7	2.0	1.0	2.8	2.6	6.1	6.7	1.6
503	Lumber	5.5	5.3	5.2	5.3	1.3	0.7	2.0	2.5	5.7	5.7	1.4
504	Prof. equip.	6.0	7.0	5.7	7.0	1.3	0.7	3.2	2.1	6.6	5.5	2.9
505	Metals	5.0	10.0	5.0	9.9	1.1	0.8	1.6	3.0	4.9	4.7	0.9
506	Electrical	5.6	6.9	5.7	6.7	1.4	0.6	2.3	2.3	5.6	6.2	2.1
507	Hardw are	5.4	6.3	5.6	6.1	1.2	0.7	1.6	2.1	5.5	5.7	1.2
508	Machinerv	6.3	6.6	6.3	6.5	2.1	0.6	2.6	2.0	6.0	6.8	2.1
509	Other Durable	6.3	9.2	6.4	8.9	1.6	0.9	2.1	2.3	6.4	6.1	1.8
51	Nondurable	1.9	2.2	1.9	2.2	0.6	0.5	1.0	1.3	1.9	1.7	0.6
511	Paper	5.0	5.1	4.9	5.1	1.1	0.6	2.0	1.9	5.2	5.0	1.0
512	Druas	6.3	4.9	6.3	4.8	1.0	0.6	2.4	1.6	6.4	6.9	1.2
513	Apparel	5.1	7.6	4.9	7.5	2.2	1.1	2.9	2.5	4.6	4.6	1.6
514	Groceries	3.0	4.9	3.0	5.1	0.7	0.6	1.1	1.2	3.0	3.0	0.8
515	Farm-products	6.8	8.6	6.6	8.4	2.3	1.6	2.8	4.2	6.4	5.6	2.3
516	Chemicals	5.6	6.3	5.6	6.4	1.4	0.7	2.0	2.1	5.2	5.8	1.2
517	Petroleum	6.9	14.1	6.7	14.3	0.9	1.4	1.7	1.8	7.1	7.2	1.3
518	Alcohol	6.3	8.7	6.3	8.7	1.5	1.3	1.5	15.7	6.1	6.4	1.3
519	Other Nondur.	6.4	7.6	6.4	7.6	1.9	1.2	4.2	4.1	6.4	5.6	2.9

Note: The median measures of variability are based on the most recent 12 months of data

Sample Design and Reliability of Data

There are two types of errors possible in an estimate based on a sample survey: sampling and nonsampling.

Sampling errors occur because observations are made on a sample, not on the entire population, and different samples could have led to different estimates. Standard errors and coefficients of variation, as calculated for this report, are measures of sampling variation. The margin of sampling error, as used on page 1, gives a range about the estimate which is a 90% confidence interval. If, for example, the trend estimate is up 1.2% and the standard error is 0.9%, then the margin of sampling error is $\pm 1.65 \times 0.9\%$ or $\pm 1.5\%$. and the 90% confidence interval is -0.3% to +2.7%. If the interval contains 0, it cannot be stated with certainty whether there was an increase or decrease. For monthly level, the coefficient of variation (CV) is given. The resulting confidence interval is the estimated value ±1.65 x CV x (the estimated value).

Nonsampling errors are usually attributed to many possible sources: (1) coverage error - failure to accurately represent all population units in the sample, (2) inability to obtain

information about all sample cases, (3) response errors, possibly due to definitional difficulties ormisreporting, (4) mistakes in recording or coding the data obtained, and (5) other errors of collection or processing, or in imputing for missing or inconsistent data. Coverage error has an effect on the accuracy of estimates for this survey to the extent that the administrative records system, which forms the basis of our survey universe frame, does not contain all legal businesses. A major source of nonsampling error in the published estimates is due to the need to impute data for nonrespondents and for late and inconsistent reports. For all kinds of businesses combined, imputed data amount to about 31 percent of the total monthly wholesale sales estimates and 32 percent of the total monthly wholesale inventories estimates.

Nonsampling errors also occur in complete censuses. Although no direct measures of these errors have been obtained, precautionary steps were taken in all phases of the collection, processing, and tabulation of the data to minimize their influence.

U.S. Department of Commerce U.S. Census Bureau Washington, DC 20233 FIRST- CLASS MAIL POSTAGE & FEES PAID CENSUS PERMIT No. G- 58

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Table 3. Seasonal Adjustment Factors for Sales and Inventories of Merchant Wholesalers

SIC	Kind of			Sa	les			Inventories						
code	Business	1999						1999					1998	
		Jul.	Jun.r	Mayr	Apr.	Mar.	Jun.r	Jul.	Jun.r	Mayr	Apr.	Mar.	Jun.r	
	U.S. Total ¹	0.989	1.042	0.991	1.010	1.077	1.045	0.993	0.986	0.994	1.006	1.009	0.985	
50	Durable	0.994	1.057	0.976	1.007	1.082	1.060	1.011	1.002	1.009	1.009	1.003	1.002	
501	Automotive	1.003	1.066	1.002	1.046	1.120	1.064	0.993	0.989	1.006	1.015	1.017	0.989	
502	Furniture	0.968	1.014	0.969	1.016	1.048	1.032	1.022	1.019	0.996	0.974	0.984	1.018	
503	Lumber	1.067	1.125	1.018	1.019	1.017	1.113	1.017	1.034	1.028	1.028	1.021	1.032	
504	Prof. equip.	0.980	1.063	0.935	0.976	1.102	1.064	1.011	0.995	0.996	1.007	0.999	0.994	
505	Metals	0.964	1.056	0.984	1.031	1.108	1.051	1.011	1.003	1.004	1.005	1.011	1.003	
506	Electrical	0.996	1.035	0.950	0.967	1.071	1.033	1.027	1.021	1.006	0.996	0.985	1.021	
507	Hardware	1.069	1.105	0.985	0.991	0.986	1.110	1.001	1.015	1.024	1.021	1.011	1.014	
508	Machinery	0.977	1.059	1.014	1.063	1.113	1.081	1.011	1.005	1.018	1.020	1.009	1.005	
509	Other Durable	0.956	0.995	0.949	0.964	1.048	1.007	1.027	0.989	0.993	0.983	0.966	0.990	
51	Nondurable	0.988	1.028	1.009	1.015	1.068	1.029	0.960	0.956	0.965	1.009	1.018	0.956	
511	Paper	0.965	1.000	0.935	0.996	1.063	0.996	1.000	0.982	0.979	1.008	1.005	0.982	
512	Drugs	0.964	0.996	0.944	1.010	1.070	1.000	0.989	0.967	0.955	1.006	1.004	0.967	
513	Apparel	1.056	0.995	0.833	0.960	1.131	0.986	1.032	1.018	0.975	0.962	0.962	1.017	
514	Groceries	1.020	1.026	1.032	0.984	1.052	1.027	0.998	0.987	0.994	0.987	0.982	0.987	
515	Farm-products	0.883	0.945	0.954	0.943	1.066	0.949	0.749	0.769	0.830	0.991	1.091	0.770	
516	Chemicals	0.990	1.097	1.019	1.020	1.067	1.088	0.999	0.995	1.014	1.002	1.006	0.997	
517	Petroleum	0.970	0.988	0.991	1.028	1.020	0.989	0.971	0.957	1.000	0.992	0.970	0.958	
518	Alcohol	1.034	1.108	1.020	1.000	1.011	1.099	1.020	1.014	0.967	0.993	0.998	1.011	
<u>519</u>	Other Nondur.	0.978	1.089	1.178	1.154	1.082	1.105	0.944	0.952	0.995	1.058	1.080	0.955	



r Revised

1 Adjusted sales and inventories data shown in Table 1 are obtained by dividing the unadjusted data by the adjustment factors shown above for the corresponding group. Adjusted data for the totals are obtained by adding the durable and nondurable goods. Seasonal factors shown for the totals will provide an approximation of the adjusted estimates, but may show small differences from the published data.

Note: The seasonal factors shown have been computed based on monthly estimates through the current month preliminary estimates.